



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/016,968

12/13/2001

Yaron Mayer

1773

7590

06/15/2004

YARON MAYER
21 AHAD HA'Am ST.
JERUSALEM, 92151
ISRAEL

EXAMINER

NGUYEN, TUYEN T

ART UNIT

PAPER NUMBER

2832

DATE MAILED: 06/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/016,968

Applicant(s)

MAYER ET AL.

Examiner

TUYEN T NGUYEN

Art Unit

2832

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 46-71 is/are pending in the application.
- 4a) Of the above claim(s) 48, 49 and 57-71 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 46, 47, 50, 51 and 54-56 is/are rejected.
- 7) ☒ Claim(s) 52 and 53 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of claims 1-2 and 5-11 [renumbered 46-47 and 50-56] in the reply filed on 2/20/2003 is acknowledged.

Specification

The disclosure is objected to because of the following informalities: numerous spelling errors throughout the specification, for example, on page 4, line 3, "Or" should be corrected as – or --, on page 8, line 18 and page 9, line 4, "Buckey" should be corrected as – Bucky – and on page 10, line 18, "methane" should be corrected as – methane --. Applicant should thoroughly review the specification for other spelling and grammatical errors. Appropriate correction is required.

Claim Objections

Claim 46 is objected to because of the following informalities: in claim 1, line 7, "within the core." should be corrected as -- within the core; --. In claim 50, lines 2 and 3, "The" should be corrected as – the --. In claim 51, lines 2 and 3, "The" should be corrected as – the --. In claim 53, line 2, "Protein" should be corrected as – protein --. In claim 56, "mathane" should be corrected as – methane --. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 2832

Claims 47 and 50-56 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 47, line 2, there is no antecedent basis for "the substrate of the core."

In claim 50, applicant should clarify what the higher frequencies are relative to.

In claim 51, applicant should clarify what the lower frequencies are relative to.

In claims 54-55, there is no antecedent basis for "said electrical wires."

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 46-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshizawa et al. [US 5,567,537].

Yoshizawa et al. disclose an electrical coil-based device [figure 1] based on some nano-scale structures comprising:

- at least one magnetically-soft core having nano-size magnetically responsive structures therein [1, column 2, lines 37-56]; and
- at least one coil wire [figure 1] wrapped around at least part of the core.

Yoshizawa et al. disclose the instant claimed invention except for the coil wire being electrically insulated.

Art Unit: 2832

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use insulation on the coil wire for the purpose of preventing short circuiting between adjacent coil layers.

Claim 50 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshizawa et al. in view of Inoue et al. [US 20020097124]

Yoshizawa et al. disclose the instant claimed invention except for the core structure having NiZn.

Inoue et al. disclose the use of NiZn in a magnetic structure.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use NiZn in the core structure of Yoshizawa et al., as suggested by Inoue et al., for the purpose of using the device at higher frequencies.

Claim 51 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshizawa et al. in view of Pornponio [US 4,656,451]

Yoshizawa et al. disclose the instant claimed invention except for the core structure having MnZn.

Pornponio discloses the use of MnZn in a magnetic structure.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use MnZn in the core structure of Yoshizawa et al., as suggested by Pornponio, for the purpose of using the device at lower frequencies.

Claims 54-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshizawa et al. in view of Liberman et al. [US 2003/0135971].

Yoshizawa et al. disclose the instant claimed invention except the coil being formed of nano-fibers.

Art Unit: 2832

Lieberman et al. disclose an electrical wire formed of nano-fibers.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use use nano-fibers for the wire of Yoshizawa et al., as suggested by Lieberman et al., for the purpose of improving magnetic response.

Allowable Subject Matter

Claims 52-53 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Lobovsky et al. [2004/0096389].

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuyen T Nguyen whose telephone number is (571) 272-1996. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on (571) 272-1990. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2832

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TTN TTN

Tuyen Nguyen